



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/600,535

09/18/2000

Peter J. Sims

160180.90121

7111

7590

04/26/2006

Jean C Baker
Quarles & Brady
411 East Wisconsin Ave Suite 2040
Milwaukee, WI 53202-4497

EXAMINER

VIVLEMORE, TRACY ANN

ART UNIT

PAPER NUMBER

1635

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/600,535	Applicant(s) SIMS ET AL.	
	Examiner Tracy Vivlemore	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-6, drawn to a method for extending the viability of mammalian cells by inhibiting expression of native PL scramblase with an antisense RNA molecule.

Group 2, claim(s) 1-4, 6, 7 in part and 8, drawn to a method for extending the viability of mammalian cells by inhibiting expression of native PL scramblase with a mutant PL scramblase protein.

Group 3, claim(s) 1-4, 6, 7 in part and 9, drawn to a method for extending the viability of mammalian cells by inhibiting expression of native PL scramblase with a truncated form of PL scramblase.

Group 4, claim(s) 1-4, 6 and 10, drawn to a method for extending the viability of mammalian cells by inhibiting expression of PL scramblase by preventing fatty acid acylation of nascent PL scramblase protein.

Group 5, claim(s) 1-4, 6 and 11, drawn to a method for extending the viability of mammalian cells by inhibiting expression of PL scramblase through deacylation of mature PL scramblase protein.

Group 6, claim(s) 12-17, 23, 25 and 26, drawn to a method of decreasing the viability, metastatic or invasive potential of cancer cells, cancerous tissue or viral-infected cell by increasing expression of native PL scramblase by transfection of a PL scramblase coding sequence.

Group 7, claim(s) 12-16, 18, 23 and 26, drawn to a method of decreasing the viability, metastatic or invasive potential of cancer cells, cancerous tissue or viral-infected cell by increasing expression of native PL scramblase by decreasing expression of alternatively spliced transcripts of PL scramblase.

Group 8, claim(s) 12-14, 17, 23, 24 and 26, drawn to a method of decreasing the viability, metastatic or invasive potential of cancer cells, cancerous tissue or viral-

Art Unit: 1635

infected cell by increasing expression of native PL scramblase by activation of the promoter of an endogenous PL scramblase gene.

Group 9, claim(s) 19-21 and 29, drawn to a method of determining the status of a patient's cancer or diagnosing metastatic and invasive potential of a cancer cell or cancerous tissue by analyzing the amount of PL scramblase RNA or protein with oligonucleotide primers based on human PL scramblase.

Group 10, claim(s) 19, 20, 22 and 30, drawn to a method of determining the status of a patient's cancer or diagnosing metastatic and invasive potential of a cancer cell or cancerous tissue by analyzing the amount of PL scramblase RNA or protein with antibodies that bind to PL scramblase protein.

Group 11, claim(s) 27 and 28, drawn to a method of diagnosing metastatic and invasive potential of a cancer cell by analyzing the sequence of a patient's PL scramblase gene for the presence or absence of mutations.

The inventions listed as Groups 1-10 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of group 1 is use of an antisense inhibitor of PL scramblase to extend the viability of mammalian cells. This special technical feature was known in the art at the time of invention. See, for example WO 97/37225 (cited on international search report), which discloses methods of prolonging survival of cells such as blood cells using an inhibitor of PL scramblase. Inhibitors of PL scramblase are disclosed as including antisense oligonucleotides.

The special technical feature of group 1 is use of antisense RNA to inhibit expression of PL scramblase.

The special technical feature of group 2 is use of a mutant PL scramblase protein to inhibit expression of PL scramblase.

The special technical feature of group 3 is use of a truncated form of PL scramblase to inhibit expression of PL scramblase.

The special technical feature of group 4 is prevention of fatty acid acylation of nascent PL scramblase protein to inhibit expression of PL scramblase.

The special technical feature of group 5 is deacylation of mature PL scramblase protein to inhibit expression of PL scramblase.

The special technical feature of group 6 is transfection of a PL scramblase coding sequence to increase expression of PL scramblase.

The special technical feature of group 7 is decrease of expression of alternatively spliced transcripts of PL scramblase to increase expression of PL scramblase.

The special technical feature of group 8 is activation of the promoter of an endogenous PL scramblase gene to increase expression of PL scramblase.

The special technical feature of group 9 is use of oligonucleotide primers to analyze the amount of PL scramblase RNA.

The special technical feature of group 10 is use of antibodies to human PL scramblase to analyze the amount of PL scramblase RNA.

The special technical feature of group 11 is analysis of the sequence of a patient's PL scramblase gene to diagnose metastatic and invasive potential of a cancer cell.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 1635

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Vivlemore whose telephone number is 571-272-2914. The examiner can normally be reached on Mon-Fri 8:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tracy Vivlemore
Examiner
Art Unit 1635

TV
April 17, 2006


JAMES SCHULTZ, PH.D.
PRIMARY EXAMINER